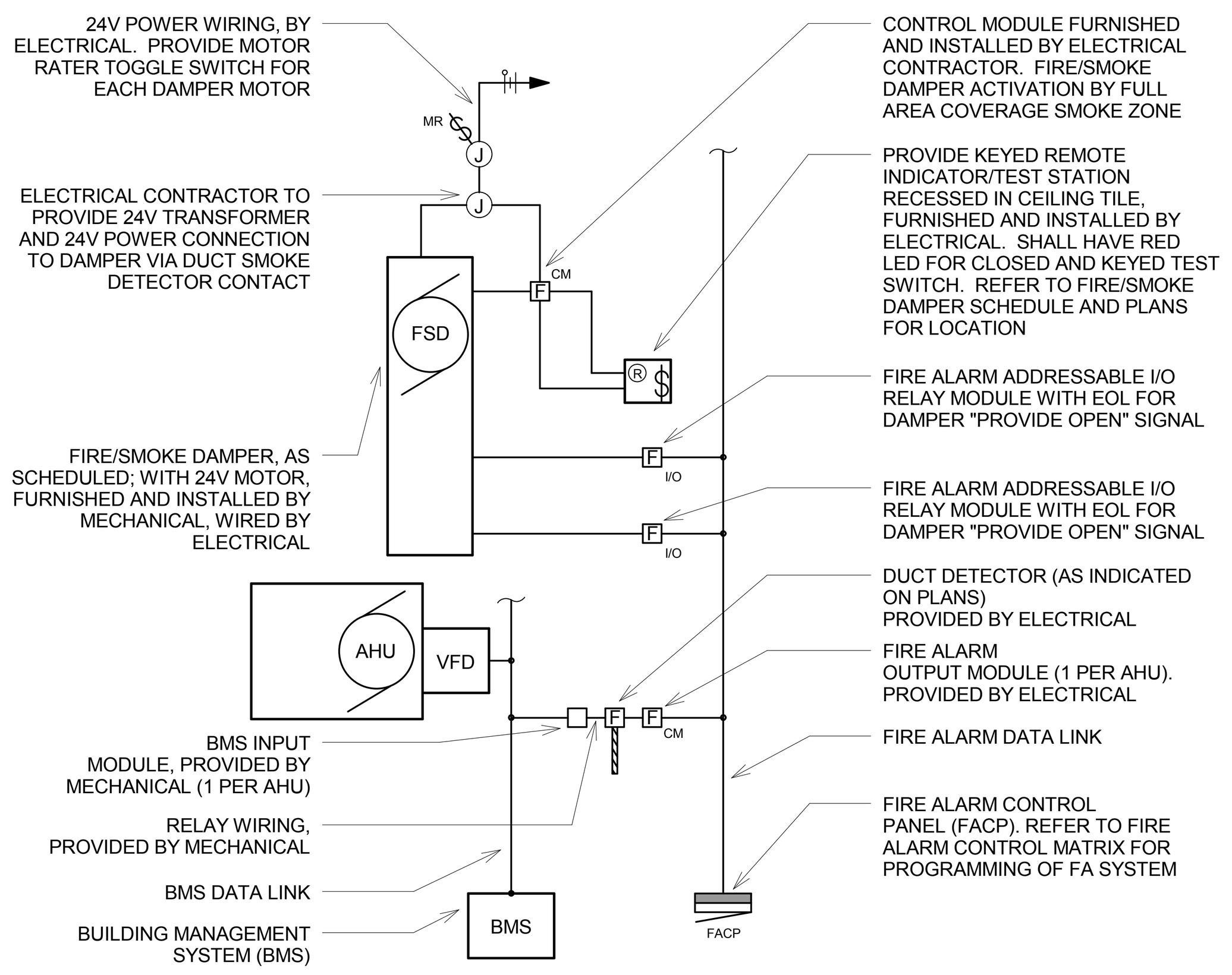
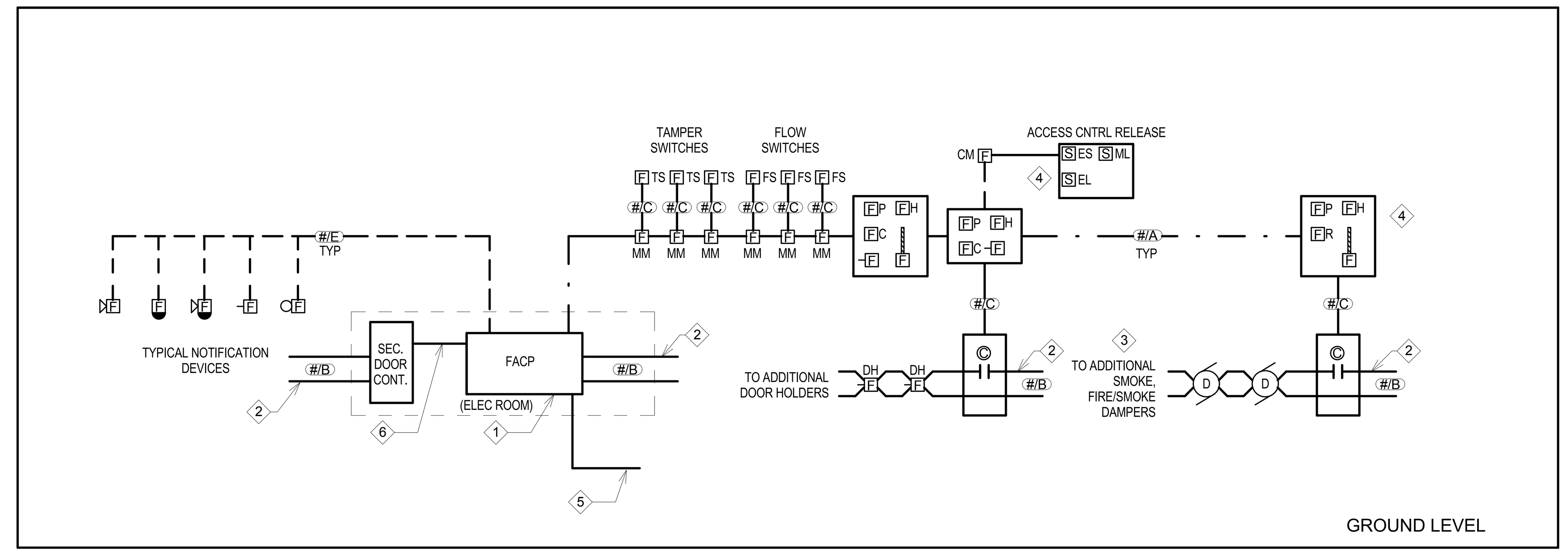


1 F/S DAMPER CONTROL DETAIL
12" = 1'-0"



2 FIRE ALARM CABLING RISER
1/4" = 1'-0"

FIRE ALARM CONTROL MATRIX														
ACTION	FIRE ALARM DEVICE													
	NOTES	MANUAL PULL STATION	HEAT DETECTOR	AREA SMOKE DETECTOR	DEDICATED DOOR HOLD SMOKE DETECTOR	F/S DAMPER DUCT DETECTOR	AHU DUCT DETECTOR	ZONE WATER FLOW SWITCH	MAIN WATER FLOW SWITCH	SPRINKLER SYSTEM TAMPER SWITCH	FA PHONE LINE LOSS	FIRE ALARM PANEL/ CIRCUIT TROUBLE	SPEAKER AMP OR TONE GENERATOR TROUBLE	PRIMARY & SECONDARY POWER MONITOR
SEND ALARM SIGNAL TO FACP	1	XX	XX	XX	XX			XX	XX					
SEND SUPERVISORY SIGNAL TO FACP	1					XX	XX			XX				
SEND TROUBLE SIGNAL TO FACP	1										XX	XX	XX	XX
SHUT DOWN ENTIRE SMOKE COMPARTMENT SUPPLY, RETURN, AND EXHAUST FANS; & CLOSE ASSOCIATED SMOKE DAMPERS				XX		XX	XX							
ACTIVATE NOTIFICATION DEVICES ON ALL FLOORS	5	XX	XX	XX				XX						
RELEASE DOOR HOLDS, POWERED FIRE DOORS, AND POWERED SECURITY DOORS THROUGHOUT BUILDING		XX												XX
RELEASE DOOR HOLDS, POWERED FIRE DOORS, AND POWERED SECURITY DOORS IN SMOKE COMPARTMENT OF INITIATION ONLY			XX	XX	XX									
NOTES:				2,4	7	4	4		6	17	3			8,16

GENERAL NOTES:
A. REFER TO SPECIFICATION SECTION 16721 FOR ADDITIONAL FIRE ALARM SYSTEM REQUIREMENTS.
B. ALL ACTIONS SHALL INDICATE A SPECIFIC DEVICE AND LOCATION TO THE CONTROL PANEL(S), ANNUNCIATOR PANEL(S), DACT, AND SYSTEM PRINTER.
C. NOT ALL DEVICES MAY BE REQUIRED. REFER TO PLANS FOR ACTUAL DEVICES.

SPECIFIC NOTES: (NOT ALL SPECIFIC NOTES WILL BE USED IN MATRIX)
1. SEND SIGNAL TO REMOTE ALARM RECEIVING STATION.
2. IN SOME ROOMS, AREA SMOKE DETECTORS SHALL BE PROGRAMMED SO THAT UPON ACTIVATION OF THE FIRST SMOKE DETECTOR, A SUPERVISORY SIGNAL IS SENT. UPON ACTIVATION OF A SECOND SMOKE DETECTOR AN ALARM SIGNAL WILL BE SENT. REFER TO PLANS FOR DUAL SMOKE DETECTOR LOCATIONS AND ZONING.
3. FACP SHALL SWITCH TO SECOND PHONE LINE AND SEND TROUBLE SIGNAL TO REMOTE ALARM RECEIVING STATION.
4. FOR SMOKE TYPE DETECTORS FOR SMOKE DAMPER CONTROL, FACP SHALL SEND SIGNAL TO BUILDING MANAGEMENT SYSTEM TO SHUT DOWN ONLY SUPPLY, RETURN, AND EXHAUST FANS FOR ENTIRE AFFECTED SMOKE COMPARTMENT (10) SECONDS PRIOR TO CLOSING ASSOCIATED FIRE/SMOKE DAMPERS. REFER TO AHU ZONING PLANS.
5. ACTIVATE ALL EXTERIOR NOTIFICATION DEVICES.
6. ACTIVATE STAND-ALONE EXTERIOR NOTIFICATION DEVICE LOCATED ABOVE SIAMESE CONNECTION.
7. RELEASE DOOR HOLD FOR ASSOCIATED DOOR ONLY. REFER TO PLANS FOR DEDICATED DOOR HOLD SMOKE DETECTOR LOCATIONS.
8. FOR OVERHEAD COILING DOORS, PROVIDE TIME DELAY OF AT LEAST 15 SECONDS AFTER LOSS OF POWER BEFORE DOOR HOLDS ARE RELEASED.
9. LOCATE DEVICE WITHIN 2' OF EACH SPRINKLER HEAD. HEAT DETECTORS SHALL HAVE A LOWER RESPONSE TIME INDEX (RTI) THAN THE SPRINKLER HEAD IN THAT AREA.
10. ELEVATOR RECALL SHALL NOT RECALL ELEVATOR/ELEVATOR BANK TO SAME FLOOR AS FLOOR WITH ACTIVATED INITIATING DEVICE.
11. DEVICE(S) SHALL ACTIVATE SHUNT TRIP IMMEDIATELY UPON OR PRIOR TO DISCHARGE OF WATER.
12. ACTION SHALL BE MANUALLY RESET ONLY. ELEVATOR SMOKE DETECTORS ARE NOT ALLOWED TO PERFORM ALARM VERIFICATION.
13. MONITOR FOR PUMP RUNNING, PHASE REVERSAL, AND FAILURE.
14. GENERATOR FAILED START SHALL SEND TROUBLE SIGNAL. UPON GENERATOR START, FACP AND REMOTE FAAP'S SHALL INDICATE GENERATOR IN "RUN" MODE.
15. SMOKE DETECTOR SHALL HAVE AUXILIARY CONTACTS FOR CONNECTION TO PATIENT ROOM NURSE CALL LIGHT, WIRING BY OTHERS.
16. DACT PRIMARY POWER TROUBLE SIGNAL SHALL BE SENT WHEN BATTERY CAPACITY IS BETWEEN 25 & 50%.
17. SEND SIGNAL ON BOTH OFF-NORMAL POSITION AND RETURN TO NORMAL POSITION.
18. UPON ACTIVATION OF MAIN WATER FLOW SWITCH, FA SHALL SEND SIGNAL TO CONTROL MODULE AT MATER SERVICE EMERGENCY CONTROL VALVE TO CLOSE DOMESTIC WATER SUPPLY TO THE REST OF THE BUILDING. COORDINATE WITH MECHANICAL CONTRACTOR.

3 Fire Alarm Control Matrix
1/8" = 1'-0"

GENERAL NOTES:

A. THE WIRING DIAGRAM IS CONCEPTUAL ONLY AND DOES NOT INDICATE ALL DEVICES, DEVICE TYPES OR QUANTITY OF LOOPS. REFER TO FLOOR PLANS FOR DEVICE QUANTITIES AND LOCATIONS.

B. THE SYSTEM DIAGRAM IS BASED ON A DIGITAL, ADDRESSABLE FIRE ALARM SYSTEM.

C. ALL WIRING AND CABLING SHALL BE IN CONDUIT (MINIMUM 3/4" C.) EMT CONDUIT USED FOR FIRE ALARM WIRING SHALL INCLUDE FACTORY-APPLIED RED TOPCOAT UL-LISTED FOR FIRE ALARM USE.

D. THE INSTALLATION SHALL BE FROM DRAWINGS THAT HAVE BEEN SUBMITTED, REVIEWED AND APPROVED BY THE AUTHORITIES HAVING JURISDICTION.

E. EACH SIGNALLING CIRCUIT SHALL ALLOW 15% SPARE CAPACITY TO ADD ADDITIONAL AUDIO, VISUAL OR COMBINATION AUDIO/VISUAL SIGNALING DEVICES TO ANY OF THESE CIRCUITS.

F. PROVIDE THE CONTROL WIRING FROM FIRE ALARM CONTROLLER TO THE HVAC CONTROLLER.

KEY NOTES:

1 NEW NETWORKED FIRE ALARM CONTROL PANEL COMPATIBLE WITH EXISTING CAMPUS SYSTEM.

2 LIFE SAFETY BRANCH CIRCUIT (REFER TO POWER PLAN DWGS).

3 FIRE/SMOKE AND SMOKE DAMPER MOTORS ARE SHOWN ON MECHANICAL PLANS. VERIFY QUANTITIES AND LOCATIONS. PROVIDE FIRE ALARM CONNECTIONS TO RELAY SO THAT THE FIRE/SMOKE AND SMOKE DAMPERS CLOSE UPON LOSS OF POWER. (DIV. 26 SHALL PROVIDE RELAY AND CIRCUITING. SEE POWER PLANS FOR 120V CIRCUITING, RELAY LOCATIONS, ETC.) PROVIDE ONE (1) FIRE ALARM CONTROL MODULE PER FIRE/SMOKE DAMPER AND (1) ADDITIONAL FIRE ALARM CONTROL MODULE PER SMOKE ZONE FOR INTEGRATION WITH ALARM AIR HANDLING SEQUENCE OF OPERATIONS. SEE ARCH. LIFE SAFETY PLANS FOR SMOKE ZONES.

4 REFER TO FIRE ALARM CONTROL MATRIX FOR ALL CONTROL REQUIREMENTS.

5 FIRE ALARM NETWORK CONNECTION TO BUILDING #28. PROVIDE 4#12 AND (1) 16/2 TWISTED PAIR TO EXISTING FIRE ALARM PANEL IN BLDG. #28. ROUTE CABLING IN 2" CONDUIT. PROVIDE (2) 3/4" INNERDUCTS IN CONDUIT. ROUTE CABLING IN ONE INNERDUCT AND LEAVE SECOND INNERDUCT AS SPARE. SEE SIGNAL PLAN AND COMMUNICATIONS SITE PLANS FOR CONDUIT ROUTING.

6 DIV. 26 TO PROVIDE (2) 3/4" CONDUITS BETWEEN FIRE ALARM CONTROL PANEL AND SECURITY ACCESS CONTROL PANEL FOR INTEGRATION OF DOOR RELEASE.

ID TAG NOTATION:

#/A — CABLE TYPE CALLOUT
CABLE QUANTITIES

CABLE TYPE:

#/A INITIATING LINE CIRCUIT
#/B BRANCH CIRCUIT
#/C CONTROL CIRCUIT
#/D FIBER OPTIC CONNECTION
#/E SIGNAL LINE CIRCUIT
#/F TWO-HOUR RATED PRIMARY BACKBONE (CLASS A)
#/G TWO-HOUR RATED REDUNDANT BACKBONE (CLASS A)
#/H FUTURE FIRE FIGHTERS TELEPHONE HOMERUN

No	REVISION	DATE
	100% OWNER REVIEW NOT FOR CONSTRUCTION 12/16/2011	

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed Engineer under the laws of the State of Minnesota.

Signature

Registration No.

Date 11/17/2011

APPROVED: SERVICE LINE DIRECTOR DATE:
APPROVED: INFECTION CONTROL NURSE DATE:
APPROVED: GEMS COORDINATOR DATE:
APPROVED: PATIENT SAFETY DATE:
APPROVED: PROJECTS SECTION MANAGER DATE:
APPROVED: CHIEF OF POLICE DATE:
APPROVED: DIRECTOR FMS DATE:
APPROVED: SAFETY MANAGER DATE:
APPROVED: CHIEF OF STAFF DATE:
APPROVED: MEDICAL CENTER DIRECTOR DATE:

DRAWING TITLE: FIRE ALARM RISER DIAGRAM
PROJECT TITLE: LONG TERM/INTERMEDIATE PSYCHIATRIC UNIT
DATE: 12/16/2011
PLOT SCALE: AS NOTED
PROJECT NO.: 2032.001.00
BUILDING No
CHECKED BY: SW
DRAWN: AJZ
CAD FILE
LOCATION: 4801 VETERANS DR. SAINT CLOUD, MN
DRAWING NO.: E015
DWG. OF

VAMC SAINT CLOUD MN

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